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IPSOLON LLP 805 SW BROADWAY, #2740 PORTLAND, OR 97205			STORK, KYLE R	
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			2178	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/992,417	CHANG ET AL.	
	Examiner	Art Unit	
	Kyle R Stork	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the application filed 18 November 2001.
2. Claims 1-66 are pending. Claims 1, 13, 14, 26, 42, and 49 are independent claims.

Claim Objections

3. Claim 15 and 36 is objected to because of the following informalities.

As per claim 15, the applicant discloses "... at the in formation apparatus," line 2.

As per claim 36, the applicant discloses "... retrieving the output content form a storage," line 2.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claims 1-48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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As per independent claim 1, the applicant discloses, "transmitting from the information apparatus the document object and the output device object to a processor that is distinct from the information apparatus and the selected output device." In the specification, the applicant discloses, "Fig. 1 is a block diagram of a pervasive output system that can implement the process and apparatus of the present invention." However, Fig. 1 fails to disclose the processor that is distinct from the information apparatus and the selected output device.

As per independent claims 13, 14, 26, and 42, the applicant discloses the limitations similar to those in claim 1, and the same rejection is incorporated herein.

As per dependent claims 2-12, 15-25, 27-41, and 43-49, the dependency upon rejected claims and they are similarly rejected.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per dependent claim 3, the applicant discloses the method, "further comprising receiving the output data at the information apparatus and delivering the output data from the information apparatus to the selected output device." However, in claim 1, the applicant set forth the limitation of, "transmitting from the information apparatus the document object and the output device object to a processor that is distinct from the information apparatus and the selected output device." Then further

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"generating with the processor output data acceptable for rendering at the selected output device." Claim 3 contradicts the limitations set forth in claim 1, and is therefore indefinite.

8. The term "more acceptable" in claim 31 is a relative term which renders the claim indefinite. The term "more acceptable" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-10, 12-23, 25-31, 41-45, 49-50, 56, 58, 59-60, and 62 are rejected under 35 U.S.C. 102(e) as being anticipated by Hamzy (US 6623527, 23.9.2003).

As per independent claim 1, Hamzy discloses a data output method for rendering at a selected output device output content at least identifiable from an information apparatus, comprising:

- Obtaining at the information apparatus a document object related to the output content (Figure 2: Here, the proxy server (103) is the information apparatus, and the document object is the web page retrieved from www.ibm.com (105))
- Obtaining at the information apparatus an output device object with one or more attributes corresponding to the selected output device (column 6, lines 52-61)
- Transmitting from the information apparatus the document object and the output device object to a processor that is distinct from the information apparatus and the selected output device (Figure 2: Here, the proxy server (111) is distinct from proxy server (103) which is acting as the information apparatus. Proxy server (111) is also distinct from the output device (117))
- Generating with the processor output data acceptable for rendering at the selected output device (Figure 3, item 215; column 6, lines 41-51)

As per dependent claim 2, Hamzy discloses the method further comprising delivering the output data from the processor to the selected output device through a network (Figure 2; column 4, lines 33-34).

As per dependent claim 3, Hamzy discloses the method further comprising receiving the output data at the information apparatus and delivering the output data from the information apparatus to the selected output device (Figure 2: Here, output data is generated and comes through the information apparatus (103) and is outputted by the printer (117)).

As per dependent claim 4, Hamzy discloses the method in which the output data comprises one or more of a page description language, a markup language, a file

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format, an image format, a graphics format, an audio file, and a video file (column 4, line 66- column 5, line 3; Figure 2: Here, the unmodified web page (107) is an HTML page (column 4, lines 55-59) which is a page written in a markup language).

As per dependent claim 5, Hamzy discloses the method in which the generating of the output data comprises at least a partial raster image processing operation on the output content (column 6, lines 42-45: Here, the conversion of the web page to a set of graphics is the rasterization).

As per dependent claim 6, Hamzy discloses the method further comprising establishing a communication channel between the information apparatus and the output device and receiving one or more attributes characterizing the output device (Figure 2: Here, the communication channel is illustrated; column 7, lines 54-58: Here, the location of the printer is an attribute characterizing the output device).

As per dependent claim 7, Hamzy discloses the method further comprising discovering the selected output device as one of one or more output devices that are discovered by the information apparatus as being available for rendering the output (column 6, lines 52-61).

As per dependent claim 8, Hamzy discloses the method further comprising selecting one of the one or more output devices that are discovered (Figure 4B, items 333, 335, and 337; column 7, lines 34-36; column 7, lines 49-53).

As per dependent claim 9, Hamzy discloses the method further comprising obtaining at the information apparatus a job object with one or more attributes characterizing the rendering of the output content (column 6, lines 41-51).

As per dependent claim 10, Hamzy discloses the method in which the document object includes the output content (column 4, line 66- column 5, line 4).

As per dependent claim 12, Hamzy discloses the method in which the output device object includes an identification attribute that includes one or more of an output device brand indication, a model indication, an output device identification, type of output device indication, and a network address indication (Figure 4B, items 335 and 337).

As per independent claim 13, the computer readable medium for executing the method of claim 1 is disclosed and is similarly rejected under Hamzy.

As per independent claim 14, Hamzy discloses an information apparatus with access to at least identifiable output content, a data output method for rendering the output content at a selected output device comprising:

- Delivering a document object and an output device object from the information apparatus to a server application operated on a server that is distinct from the information apparatus and the output device, the document object being related to the output content, and the output device object having one or more attributes corresponding to the selected output device (column 6, lines 52-61; Figure 2: Here, the proxy server (103) receives the document object from the web server (105). The proxy server (103) also receives the output device object from the printer (117), in accordance with column 6, lines 52-61. This information is then sent through the client (101) to the proxy server (111) which is a distinct server.)

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- Receiving the output data at the information apparatus (column 6, lines 52-61; Figure 2)
- Delivering the output data from the information apparatus to the selected output device for rendering the output content (Figure 2)

As per dependent claim 15, Hamzy discloses the method further comprising obtaining an output device object and a document object at the information apparatus (column 6, lines 52-61; Figure 2: Here, the proxy server (103) receives the document object from the web server (105). The proxy server (103) also receives the output device object from the printer (117), in accordance with column 6, lines 52-61).

As per dependent claim 16, Hamzy discloses the method in which the obtaining the output device object relates to one or more of a user input, a communication with the selected output device, and a default (column 6, lines 52-61: Here, communication is established with the selected output device).

As per dependent claim 17, the applicant recites similar limitations as claim 4, and is similarly rejected under Hamzy.

As per dependent claim 18, Hamzy discloses the method further comprising processing the output data before delivering the output data to the output device (column 6, lines 42-45: Here, the processing of the page into API calls is done before sending the page to the printer).

As per dependent claim 19, the applicant recites similar limitations as claim 6, and is similarly rejected under Hamzy.

As per dependent claim 20, the applicant recites similar limitations as claim 7, and is similarly rejected under Hamzy.

As per dependent claim 21, the applicant recites similar limitations as claim 8, and is similarly rejected under Hamzy.

As per dependent claim 22, the applicant recites similar limitations as claim 9, and is similarly rejected under Hamzy.

As per dependent claim 23, the applicant recites similar limitations as claim 10, and is similarly rejected under Hamzy.

As per dependent claim 25, the applicant recites similar limitations as claim 12, and is similarly rejected under Hamzy.

As per independent claim 26, Hamzy discloses the information apparatus enabled to manage the generating of device dependent output data acceptable for rendering at a selected output device, the device dependent output data corresponding to output content identifiable at least partly by an information apparatus, the information apparatus comprising:

- A communication unit to communicate with one or more output device and a user interface for interacting with a user (Figure 1, item 46; column 6, lines 20-21)
- Means for establishing a communication channel between the information apparatus and the selected output device (Figure 2)
- Means for receiving at the information apparatus over the communication channel one or more attributes corresponding to the selected output device (column 6, lines 52-61)

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- Means for delivering at least part of a document object and at least part of an output device object to a device that is distinct from the information apparatus and the output device, the document object being associated with the output content (Figure 2)
- The output device object having one or more attributes corresponding to the selected output device (column 6, lines 52-61)

As per dependent claim 27, Hamzy discloses the apparatus further comprising means of selecting an output device compatible for receiving the output data for rendering the output content (Figure 4B, items 333, 335, and 337; column 7, lines 34-36; column 7, lines 49-53).

As per dependent claim 28, the applicant recites similar limitations as claim 7, and is similarly rejected under Hamzy.

As per dependent claim 29, Hamzy discloses the apparatus in which the communication channel is wireless (column 3, lines 63-64).

As per dependent claim 30, Hamzy discloses the apparatus further comprising means of delivering the output data to the selected output device for rendering of the output (Figure 2).

As per dependent claim 31, Hamzy discloses the apparatus further comprising means of conforming at the information apparatus the output data into a form more acceptable for rendering at the selected output device (column 6, lines 42-45).

As per dependent claim 41, the applicant recites similar limitations as claim 16, and is similarly rejected under Hamzy.

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As per independent claim 42, the applicant recites similar limitations as claim 26, and is similarly rejected under Hamzy.

As per dependent claim 43, the applicant recites similar limitations as claim 27, and is similarly rejected under Hamzy.

As per dependent claim 44, the applicant recites similar limitations as claim 7, and is similarly rejected under Hamzy.

As per dependent claim 45, the applicant recites similar limitations as claim 31, and is similarly rejected under Hamzy.

As per independent claim 49, Hamzy discloses the computer readable medium, a data structure for rendering at an output device output content managed with an information apparatus, comprising:

- A document object related to the output content managed with the information apparatus (Figure 2)
- An output device object with one or more attributes corresponding to the selected output device (Figure 2; column 6, lines 52-61)

As per dependent claim 50, the applicant recites similar limitations as claim 9, and is similarly rejected under Hamzy.

As per dependent claim 56, the applicant recites similar limitations as claim 10, and is similarly rejected under Hamzy.

As per dependent claim 58, Hamzy discloses the medium in which the output content is stored on a device other than the information apparatus (column 4, line 66-

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column 5, line 3: Here, the document is received by another proxy server, so it is subsequently stored on that server).

As per dependent claim 59, Hamzy discloses the medium in which the document object includes one or more document instruction attributes that include instructions for one or more of viewing, obtaining, opening, interpreting, encoding, decoding, converting, compressing, decompressing, rasterizing, authenticating, encrypting, decrypting, or manipulating the output content (column 4, lines 37-39: Here, the document object is an HTML file which contains several instructions that disclose how to view the document).

As per dependent claim 60, Hamzy discloses the medium in which the document object includes one or more of software code and software application (column 4, lines 37-39: Here, the document object is an HTML file which contains several instructions that disclose how to view the document that are the equivalent of software code).

As per dependent claim 62, the applicant recites similar limitations as claim 12, and is similarly rejected under Hamzy.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claims 11, 24, 57, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamzy and in further view of Lam (US 6345371, 5.2.2002).

As per dependent claim 11, Hamzy discloses the limitations similar to those in claim 1, and the same rejection is incorporated herein. Hamzy fails to disclose the method in which the document object includes a pointer or reference to the output content. Lam discloses using a pointer or reference as a way of supplying output content (column 6, lines 16-20).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy's method of associating document objects with output content with Lam's method of using a pointer as a reference to output content, since it would have allowed a user to speed up the process of retrieving output content, since associating the output with a document object would allow the output to be found more quickly than simply searching for the output.

As per dependent claim 24, the applicant recites similar limitations as claim 11, and is similarly rejected under Hamzy and Lam.

As per dependent claim 57, the applicant recites similar limitations as claim 11, and is similarly rejected under Hamzy and Lam.

As per dependent claim 61, the applicant recites similar limitations as claim 11, and is similarly rejected under Hamzy and Lam.

13. Claims 32-36, 39, and 46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamzy and in further view of Cooper et al. (US 5920688, 6.7.1999).

As per dependent claim 32, Hamzy discloses the limitations similar to those in claim 26, and the same rejection is incorporated herein. Hamzy fails to specifically disclose the apparatus further comprising client application for managing the rendering of output content. Cooper discloses the apparatus further comprising client application for managing the rendering of output content (Figure 3; column 2, lines 14-17; column 3, lines 1-17).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy's apparatus to manage generating output with Cooper's apparatus using a client application to render output, since it would have allowed a user to use a single application on all systems to abstract over the hardware differences of systems connected to a network.

As per dependent claim 33, Hamzy and Cooper disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Cooper further discloses the apparatus in which the client application further includes means to communicate through an operating system with other applications residing in the same information apparatus (column 1, lines 49-53).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy and Cooper's apparatus for managing rendering output with Cooper's apparatus using an operating system, since it would have allowed a user to issue simple instructions on rendering and have the operating system make system calls to execute the instructions.

As per dependent claim 34, Hamzy and Cooper disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Cooper further discloses the apparatus in which the client application further includes means to manage and utilize functionalities provided by hardware components (column 1, lines 57-59; column 1, lines 63-65).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy and Cooper's apparatus for managing rendering output with Cooper's apparatus including means to manage and utilize functionalities proved by hardware components, since it would have allowed a user to allow the hardware for rendering to render the output, instead of the user having to specify to the hardware how to render the output.

As per dependent claim 35, Hamzy and Cooper disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Cooper further discloses the apparatus in which the client further includes means to implement a graphical user interface (GUI) in the information apparatus to interact with user (column 4, lines 1-7).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy and Cooper's apparatus for managing rendering output with Cooper's apparatus including means to implement a GUI to interact with the user, since it would have allowed a user to visually select a document to be rendered.

As per dependent claim 36, Hamzy and Cooper disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Cooper further discloses the apparatus in which the client further includes means to retrieve the output content from a storage component of the information apparatus (column 4, lines 7-10).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy and Cooper's apparatus for managing rendering output with Cooper's apparatus including means to retrieve output content from a storage component, since it would have allowed a user to output an output content that he/she had previously saved to memory.

As per dependent claim 39, the applicant recites similar limitations as claim 5, and is similarly rejected under Hamzy in further view of Cooper.

As per dependent claim 46, the applicant recites similar limitations as claim 32, and is similarly rejected under Hamzy in further view of Cooper.

As per dependent claim 47, the applicant recites similar limitations as claim 33, and is similarly rejected under Hamzy in further view of Cooper.

As per dependent claim 48, the applicant recites similar limitations as claim 34, and is similarly rejected under Hamzy in further view of Cooper.

14. Claims 37-38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamzy and Cooper and in further view of Microsoft® Word 2000 (Figure 1, 1999).

As per dependent claim 37, Hamzy and Cooper disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Hamzy and Cooper fail to disclose the apparatus in which the client application further includes means for

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retrieving the output content from another application in the information apparatus. However, Word 2000 discloses the apparatus in which the client application further includes means for retrieving the output content from another application in the information apparatus (Figure 2: Here, the output content is the document that the user is working in. The printer then retrieves the document (output content) from Word 2000.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy and Cooper's apparatus for managing rendering with Word 2000's apparatus for retrieving output content from another application, since it would have allowed a user to pipe information from application to another application for additional processing.

As per dependent claim 38, Hamzy and Cooper disclose the limitations similar to those in claim 36, and the same rejection is incorporated herein. Hamzy and Cooper fail to disclose the apparatus wherein the client application further includes means for creating a document object from the output content or reference to output content. Word 2000 discloses the apparatus wherein the client application further includes means for creating a document object from the output content or reference to output content (Figure 2: Here, the output content can be printed to a file by checking the "Print to file" box").

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy and Cooper's method for rendering content with Word 2000's method of creating a document object from output object, since it would have allowed a user to create documents in a standard format from the

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output of a document in a non-standard format. For example, the user would be able to take the output of a Word 2000 file, which is viewable to only users running specific Microsoft® products, and convert it into a PDF file, which is viewable to wider range of users.

As per dependent claim 40, Hamzy and Cooper disclose the limitations similar to those in claim 32, and the same rejection is incorporated herein. Hamzy and Cooper fail to disclose the apparatus wherein the client application further includes means for creating an output device object from the one or more attributes relating to the output device. However, Word 2000 discloses the apparatus wherein the client application further includes means for creating an output device object from the one or more attributes relating to the output device (Figure 3: Here, some attributes of the output device are shown. The output device object is created from these attributes that specify how the output device will behave).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy and Cooper's apparatus for rendering output with Word 2000's apparatus for creating the output device object from the output device attributes, since it would have allowed a user to modify the attributes to make the output device output the document object in a manner suitable to him/her.

15. Claims 51, 54-55, and 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamzy and in further view of Microsoft® Word 2000 (Figure 1, 1999).

As per dependent claim 51, Hamzy discloses the limitations similar to those in claim 50, and the same rejection is incorporated herein. Hamzy fails to disclose the job

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object including an output preference attribute characterizing one or more output preferences including one or more of output quality, layout, number of copies, number of windows per page, color or grayscale, and output size (Figure 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy's medium of rendering output content with Word 2000's medium for allowing preferences to be chosen, since it would have allowed a user the ability to select the number of copies he/she wished to have produced.

As per dependent claim 54, Hamzy discloses the limitations similar to those in claim 50, and the same rejection is incorporated herein. Hamzy fails to disclose the medium in which the one or more job object attributes are obtained at least partly based on information received from the output device. Word 2000 discloses the medium in which the one or more job object attributes are obtained at least partly based on information received from the output device (Figure 2 and 3: Here, the attributes of the output device are shown. These attributes are applied to the job object and create the job object attributes).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy's medium of rendering output with Word 2000's medium of creating job object attributes from the output device, since it would allow a user to specify one set of attributes for the output device, and then have the attributes applied to all jobs unless the user specified otherwise.

As per dependent claim 55, Hamzy discloses the limitations similar to those in claim 50, and the same rejection is incorporated herein. Hamzy fails to disclose the medium in which the one or more job object attributes are obtained at least partly from a user input or a default. Word 2000 discloses the medium in which the one or more job object attributes are obtained at least partly from a user input or a default (Figure 2: Here, the default settings for outputting a job are shown).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy's medium of rendering output with Word 2000's medium of creating job object attributes from a user input or a default, since it would allow a user to specify one set of attributes for the output device, and then have the attributes applied to all jobs unless the user specified otherwise.

As per dependent claim 63, Hamzy discloses the limitations similar to those in claim 49, and the same rejection is incorporated herein. Hamzy fails to disclose the medium in which the output device object includes an output device service attribute that includes one or more of a color or grayscale output indication, a laser or inkjet indication, a duplex indication, an output quality indication, and a price per page indication. Word 2000 discloses the medium in which the output device object includes an output device service attribute that includes one or more of a color or grayscale output indication, a laser or inkjet indication, a duplex indication, an output quality indication, and a price per page indication (Figure 3: Here, the graphic resolution is an output quality indication).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy's medium of rendering output with Word 2000's medium of allowing output quality indications to be a service attribute, since it would have allowed a user to specify the quality of the output based upon what he/she was outputting. For example, the user could specify a higher resolution when outputting images, and a lower resolution when outputting text.

As per dependent claim 64, Hamzy discloses the limitations similar to those in claim 49, and the same rejection is incorporated herein. Hamzy fails to disclose the medium in which the output device object includes an output device output data attribute that indicates one or more of the one or more output data languages, the one or more output data formats, the one or more output data instruction type supported by the output device. Word 2000 discloses the medium in which the output device object includes an output device output data attribute that indicates one or more of the one or more output data languages, the one or more output data formats, the one or more output data instruction type supported by the output device (Figure 4: Here, the output format of the document can be chosen. One possibility is portrait or landscape. Another is duplex printing).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy's medium of rendering output content with Word 2000's medium for selecting output data formats, since it would have allowed a user to select attributes that would allow the output to be best displayed. For example, some text formats display in a plurality of columns, which is not suitable for

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portrait style printing. In these cases, the user may select landscape printing in order to have the best quality output.

16. Claims 52-53 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamzy and in further view of Microsoft® NT (Figure 5, 1998).

As per dependent claim 52, Hamzy discloses the limitations similar to those in claim 49, and the same rejection is incorporated herein. Hamzy fails to disclose the medium in which the job object includes an identification attribute characterizing one or more identification features including one or more of a security setting, authentication, security information, payment information, subscription information, and user identification. Windows® NT discloses the medium in which the job object includes an identification attribute characterizing one or more identification features including one or more of a security setting, authentication, security information, payment information, subscription information, and user identification (Figure 6: Here, the user identification is listed as the "User").

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy's medium of rendering output with Windows® NT's medium for including identification attributes, since it would have allowed a user to check the status of an output device and see the identification attributes of jobs in the queue, including the spot in the queue corresponding to the user's job.

As per dependent claim 53, Hamzy discloses the limitations similar to those in claim 49, and the same rejection is incorporate herein. Hamzy fails to discloses the

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medium in which the job object includes a job attribute characterizing one or more job features including one or more of a job priority or quality of service feature, job status information indication status of the output job, a job instruction feature indicating one or more of job queuing, cancellation, execution, and output priority. Windows® NT discloses the medium in which the job object includes a job attribute characterizing one or more job features including one or more of a job priority or quality of service feature, job status information indication status of the output job, a job instruction feature indicating one or more of job queuing, cancellation, execution, and output priority (Figure 6: Here, the job status information can be found under the "Pages" heading. This displays how many pages are to be output and the how many have currently been outputted).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy's medium for rendering with Microsoft® NT's method of displaying job attributes, since it would allow a user to view the status of his/her output.

As per dependent claim 66, Hamzy discloses the limitations similar to those in claim 49, and the same rejection is incorporated herein. Hamzy fails to disclose the output device object including a security attribute that indicates one or more security or authentication requirements supported by the output device. Windows® NT discloses the output device object including a security attribute that indicates one or more security or authentication requirements supported by the output device (Figure 7, security tab).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy's medium of rendering output with Microsoft® NT's medium or including security attributes, since it would have allowed a user be sure that only people with the correct permissions could output to certain output devices. For example, if the user had an output device connected to his/her personal computer, by setting the security settings, only users that the original user had authorized would be able to output to the original user's output device.

17. Claim 65 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamzy and in further view of Kupka et al. (6434535, 2002).

As per dependent claim 65, Hamzy discloses the limitations similar to those in claim 49, and the same rejection is incorporated herein. Hamzy fails to disclose the medium in which the output device object includes a payment information attribute that indicates a payment information on one or more output services provided by the output service. Kupka discloses the medium in which the output device object includes a payment information attribute that indicates a payment information on one or more output services provided by the output service (column 3, line 53- column 4, line 5).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Hamzy's medium for rendering output with Kupka's medium of using payment information, since it would have allowed a user on a network to receive payment for use of output devices. For example, if a user allowed another user to output information via a printer, the original user incurs costs of paper

and ink. However, this combination allows a user to be compensated for the cost of the paper, ink, and any other costs the original user wishes.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US006658625B1 Allen – Discloses data conversion.
- US006418439B1 Papierniak et al. – Discloses translation of information into multiple media variations.
- US006141659A Barker et al. – Discloses retrieving documents from multiple servers.
- US005940843A Zucknovich et al. – Discloses information delivery system with restriction processing.
- US006546387B1 Triggs – Discloses information management system.
- US006604135B1 Rogers et al. – Discloses a dynamic client server interaction system.
- US006453127B2 Wood et al. – Discloses establishing a connection to a remote printer.
- US006487599B1 Smith et al. – Discloses document delivery.
- US005987454A Hobbs – Discloses a method for augmenting retrieved documents.

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- US006487587B1 Dubey – Discloses data processing by proxy.
- US006020973A Levine et al. – Discloses a centralized print system.
- US 20030160993A1 Kang – Discloses a networked printer.
- US 20030120754A1 Muto et al. – Discloses a device searching apparatus.
- US 20030011805A1 Yacoub – Discloses directing print jobs in a network.
- US005852744A Agatone et al. – Discloses discovering a network printer.
- US006684261B1 Orton et al. – Discloses an operating system.
- US006529206B1 Ohki et al. – Discloses image processing.
- US 5790790 Smith et al. – Discloses document delivery and notification.
- US 2002/0010715 Chinn et al. – Discloses system for browsing on a display device.
- US 5740267 Echerer et al. – Discloses image enhancement and storage.
- US 5787412 Bosch et al. - Discloses data access to a system.

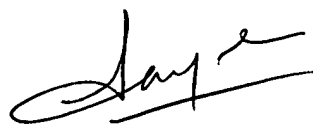
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle R Stork whose telephone number is (571) 272-4130. The examiner can normally be reached on Monday-Friday (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (703) 308-5465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Kyle Stork
Patent Examiner
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A handwritten signature in black ink, appearing to read "Sanjiv", with a stylized flourish at the end.

SANJIV SHAH
PRIMARY EXAMINER